



## MILITARY HEALTH SYSTEM OPTIMIZATION PLAN

Report No. D-2002-034

December 31, 2001

Office of the Inspector General  
Department of Defense

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### **Acronyms**

AFB	Air Force Base
AMC	Army Medical Center
ASD(HA)	Assistant Secretary of Defense (Health Affairs)
DRG	Diagnostic-Related Group
MEDCEN	Medical Center
MEPRS	Medical Expense Performance and Reporting System
MHS	Military Health System
MTF	Military Treatment Facility
PCM	Primary Care Manager
TMA	TRICARE Management Activity



INSPECTOR GENERAL  
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December 31, 2001

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR PERSONNEL  
AND READINESS  
ASSISTANT SECRETARY OF DEFENSE (HEALTH  
AFFAIRS)

SUBJECT: Report on the Military Health System Optimization Plan  
(Report No. D-2002-034)

We are providing this report for your information and use. We considered management comments on a draft of this report in preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Michael A. Joseph at (757) 766-3816, extension 223, ([mjoseph@dodig.osd.mil](mailto:mjoseph@dodig.osd.mil)) or Mr. Sanford W. Tomlin at (757) 766-3265 ([stomlin@dodig.osd.mil](mailto:stomlin@dodig.osd.mil)). See Appendix C for the report distribution. The audit team members are listed inside the back cover.

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Acting Assistant Inspector General  
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## **Office of the Inspector General, DoD**

**Report No. D-2002-034**  
(Project No. D2001LF-0043)

**December 31, 2001**

### **Military Health System Optimization Plan**

#### **Executive Summary**

**Introduction.** The Principal Deputy Assistant Secretary of Defense (Health Affairs) and the Director, TRICARE Management Activity, in conjunction with the Deputy Surgeons General, created and staffed the Military Health System Reengineering Coordination Team. The team was created to support development of a comprehensive and integrated health services delivery system. Facility optimization became the central focus of the Military Health System reengineering effort. The approach included developing a tri-Service readiness model to determine minimum staffing levels, distribution of staffing based on Military Department models and priorities, and development of a tri-Service enrollment model that would optimize enrollment and maximize services performed by the military treatment facility. The purpose of the Military Health System Optimization Plan is twofold: realign the staffing and resource allocation with the mission of the Military Health System, and optimize the effectiveness and cost efficiency of staffing and resources to deliver health care for the maximum number of beneficiaries. The Military Health System Optimization Plan, in concept, would improve the efficiency of the Military Health System.

**Objectives.** Our objective was to evaluate the Military Health System Optimization Plan and the distribution and sharing of health care resources in catchment areas,\* in medical regions, and among Military Departments. Because it was in the early implementation phase, the Optimization Plan had not been in place sufficient time for management controls to be evaluated.

**Results.** The Optimization Plan was focused at the military treatment facility level and may not meet its stated objectives. In addition, the Military Departments have not consistently implemented the Optimization Plan. Without a Military Health System-wide approach to personnel allocation, maximum efficiency and productivity of medical personnel during peacetime may not be achieved. See the Finding section for a discussion of the audit results.

**Summary of Recommendations.** We recommend that the Under Secretary of Defense for Personnel and Readiness in conjunction with the Assistant Secretary of Defense (Health Affairs) determine the best Military Health System organizational structure for implementing a Military Health System-wide focused personnel distribution process.

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\*A catchment area is defined as an approximate 40-mile radius from a military treatment facility.

We also recommend they revise the Optimization Plan to include a Military Health System-wide methodology for allocating medical personnel during peacetime, regardless of Military Department affiliation, to achieve maximum efficiency and productivity, and establish metrics for measuring the effectiveness and efficiency of Military Health System staffing and resources, and for measuring the success of the Optimization Plan.

**Management Comments.** The Assistant Secretary of Defense (Health Affairs), responding for DoD, concurred with the recommendations but emphasized that DoD, the TRICARE Management Activity, and the Military Departments will establish a forum to formally collaborate and seek opportunities to share available medical staffing. In addition, the Optimization Plan will be updated to support development of a tri-Service methodology to ensure that medical assets are considered on a local, regional, and national level for the distribution of military provider assets. The methodology must acknowledge the individual Service readiness and operational requirements and, once those requirements are met, other considerations may drive an optimal distribution plan. DoD is moving towards adopting the relative value unit as a weighted work measure of complexity and costs for episodes of outpatient care. The Military Health System Metrics Standardization Configuration Board, which has representatives from the three Military Departments, will determine the standard method for calculating the measure in the Military Health System. In addition, the tri-Service Metrics Workgroup is charged with establishing appropriate metrics for determining success in meeting all of the Military Health System optimization goals.

The Army, Navy, and Air Force also provided comments regarding the need for changes to the Military Health System organizational structure. However, all stated that Service-unique operational and readiness requirements need to be the primary consideration for staffing decisions. The Military Department comments regarding a tri-Service methodology ranged from the acceptance of the current ad hoc process to a better distribution plan with improved collaboration and cooperation that will better execute the Optimization Plan. The Military Departments agreed with the recommendation to establish Military Health System metrics, and the Air Force added that integration among the metric workgroups needs to take place to arrive at standard metrics. See the Finding section for a discussion of management comments and the Management Comments section for the complete text of the comments.

**Audit Response.** The Assistant Secretary of Defense (Health Affairs) comments were fully responsive and no additional comments are required. Establishment of a forum whereby the Military Departments can collaborate on sharing medical staffing satisfies the intent of the recommendation. We state in the report that readiness requirements are Military Department specific and are the initial consideration when allocating health care providers. The development and implementation of a tri-Service methodology to allocate medical providers would not exclude Service-unique readiness and operational requirements but add a mechanism to enhance sharing of medical personnel to address peacetime medical requirements.

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## Background

**Responsibilities.** DoD Directive 5136.1, “Assistant Secretary of Defense for Health Affairs (ASD[HA]),” May 27, 1994, states that the ASD(HA) is responsible for effective execution of the DoD medical mission. To carry out that mission, the ASD(HA) is required to exercise authority, direction, and control over the medical personnel, facilities, program funding, and other resources within the DoD. ASD(HA) responsibility includes serving as the program manager for the DoD health and medical resources. Consistent with applicable laws, funding for the DoD medical program, including operation and maintenance, procurement, and the Civilian Health and Medical Program of the Uniformed Services, shall be included in a single Defense medical appropriations account. However, ASD(HA) control over medical personnel is limited by law. Funds for active and reserve medical military personnel are excluded from the single Defense medical appropriations account. Additionally, ASD(HA) may not direct a change in the structure of the chain of command within a Military Department with respect to medical personnel and may not direct a change in the structure of the chain of command with respect to medical personnel assigned to that command.

DoD Directive 5136.12, “TRICARE Management Activity (TMA),” May 31, 2001, states that the TMA was established as a DoD Field Activity of the Under Secretary of Defense for Personnel and Readiness and operates under the authority, direction, and control of the ASD(HA). TMA began operation in February 1998 with a mission that includes managing TRICARE along with managing and executing the Defense Health Program Appropriation and DoD Unified Medical Program.

**Optimization Plan.** The Principal Deputy ASD(HA) and the Director, TMA, in conjunction with the Deputy Surgeons General, created and staffed the Military Health System (MHS) Reengineering Coordination Team. The team was created to support development of a comprehensive and integrated health services delivery system. At the outset, 29 initiatives were identified that would further the effort to create a benchmark health services delivery system and an executable funding program. Facility optimization became the central focus of the reengineering effort, and the team has since been renamed the MHS Optimization Team.

The purpose of the MHS Optimization Plan (the Optimization Plan) is twofold: realign the staffing and resource allocation with the mission of the MHS, and optimize the effectiveness and cost efficiency of staffing and resources to deliver health care for the maximum number of beneficiaries. On December 3, 1999, ASD(HA) issued the initial optimization policy requiring that each military treatment facility (MTF) assign enrollees to a specific Primary Care Manager (PCM) by the end of September 2000. Assigning enrollees to a PCM was the first in a series of fundamental steps for implementing the Optimization Plan. Additional steps included standardizing the appointment process and health evaluation assessment reviews. On March 6, 2000, ASD(HA) issued a

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tri-Service enrollment capacity planning model. The model established a goal of 1,500 enrollees for each PCM. The purpose of the goal was to improve productivity and cost efficiency of health care delivery.

**Medical Expense Reporting.** In 1974 and 1976, the House Appropriations Committee recommended that DoD develop and use uniform standards in determining medical manpower requirements. Congress wanted to be able to compare medical manpower determinants and costs of the Military Departments. In conjunction with the Military Department medical comptrollers and resource managers, the office of the ASD(HA) subsequently developed the Medical Expense Performance and Reporting System (MEPRS) and issued DoD 6010.13-M, "Medical Expense Performance and Reporting System for Fixed Military Medical and Dental Treatment Facilities," in FY 1985. The reporting system was initiated during the first quarter of FY 1986. The MEPRS Manual provides a detailed uniform chart of accounts along with implementing guidance and mandates that the MTFs implement MEPRS.

In MEPRS, each outpatient and inpatient clinical specialty is identified as a separate cost center (for example, cardiology, orthopedics, and pediatrics) and the total cost and workload are captured by cost center. MEPRS does not provide a detailed cost per outpatient procedure but does provide an average cost per visit for the various MTF outpatient clinics. A diagnostic-related group (DRG) classification is assigned to each inpatient stay. MTFs and civilian hospitals use the same DRG classifications. Each DRG is assigned a case mix index (weighted number) by the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration) that reflects the average resource consumption, such as length of stay and complexity of care, associated with the DRG. The case mix index ranges from 0.0000 to 23.0015. As an example, DRG number 391, "normal newborn," has a case mix index of 0.1088, and DRG number 103, "heart transplant," has a case mix index of 22.4925. Dividing the total cost per clinical specialty by the total of the case mix indexes provides a cost per inpatient work unit commonly referred to as the cost per relative weighted product. The Finding section of this report discusses the variation in the inpatient relative weighted costs and outpatient visit costs of Medical Centers.

## Objectives

Our overall objective was to evaluate the MHS Optimization Plan and distribution and sharing of health care resources in catchment areas,<sup>1</sup> in medical regions, and among Military Departments. Because it was in the early implementation phase, the Optimization Plan had not been in place sufficient time for management controls to be evaluated. See Appendix A for a discussion of the audit scope, methodology, and prior coverage.

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<sup>1</sup>A catchment area is defined as an approximate 40-mile radius from a military treatment facility.

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## Military Health System Optimization

Although the Optimization Plan, in concept, could improve MHS efficiency, the Optimization Plan is focused at the MTF level and may not meet its stated objectives. In addition, the Military Departments have not consistently implemented the Optimization Plan. DoD can improve MHS optimization by revising the Optimization Plan to:

- include an MHS-wide method for allocating medical personnel during peacetime regardless of Military Department affiliation, and
- establish productivity and efficiency metrics that will assist in allocating medical personnel and measuring the success of the Optimization Plan.

Without an MHS-wide approach to personnel allocation, maximum efficiency and productivity of medical personnel during peacetime may not be achieved.

## Improving MHS Efficiency

The Optimization Plan, in concept, could improve MHS efficiency but may not meet its stated objectives to realign both the staffing and resource allocation with the mission of the MHS and optimize the effectiveness and efficiency of the resultant staffing and resources. In addition, the Military Departments have not consistently implemented the Optimization Plan. Recognizing the need to improve efficiency and productivity, the MHS Optimization Team developed the Optimization Plan. The Optimization Plan required development of a tri-Service readiness model to determine minimum staffing levels, distribution of staffing based on Military Department models and priorities, and development of a tri-Service enrollment model that would optimize enrollment and maximize services performed by the MTF. A tri-Service readiness model was not developed. Conceptually, the Optimization Plan accepted the existing independent methodologies each Military Department uses for allocating health care personnel during peacetime and focused on optimizing resources already assigned to the MTF. We believe the MHS would be better served had an MHS-wide methodology been developed that addressed readiness requirements and allocation of resources before attempting to optimize the MTF. By optimizing resources already allocated to an MTF, a risk exists that additional resources could be expended to optimize resources that may not have been properly allocated.

**Optimization Policy.** On March 6, 2000, ASD(HA) issued “Policy To Improve MTF Primary Care Manager Enrollment Capacity,” which outlines the Optimization Plan goals for PCMs. A PCM is a physician or other medical professional who coordinates a patient’s care and can refer patients to specialists, if needed. Individual PCMs are typically family practitioners,

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internists, pediatricians, and general practitioners. TRICARE Region 11 [Northwest Region] was selected as the demonstration region for the Optimization Plan.

ASD(HA) contracted with a civilian health care firm to review MTFs in TRICARE Region 11 and to identify opportunities for improving the efficiency and productivity in the outpatient Primary Care Clinics.

The Optimization Plan establishes an aggregate enrollment goal of 1,500 beneficiaries for each PCM and is not specific at which level (Military Department, MTF, or clinic) the aggregate enrollment goal should be applied. The Air Force issued guidance requiring the enrollment goal to be applied at the MTF level. The Army and Navy had not issued specific guidance in that area, but the Army and Navy MTFs we visited considered applying the PCM enrollment goal at the MTF level as appropriate. To assist MTFs in achieving the enrollment goal, the Optimization Plan sets forth targets of 3.5 support staff, 2 exam rooms, and 25 visits a day for each PCM. The Optimization Plan may not accomplish the stated objectives to realign the staffing and resource allocation with the mission of the MHS and to optimize the effectiveness and efficiency of the resultant staffing and resources. If too many PCMs are assigned to the MTF, the Optimization Plan may compound the error by adding additional staffing and exam rooms that would be underutilized. Conversely, if too few PCMs are assigned to the MTF, the PCMs may not be able to meet the workload demands even if additional staff and exam rooms are provided.

**Medical Center Cost Variances.** We reviewed the DoD Medical Center (MEDCEN) MEPRS inpatient and outpatient cost and workload data for FY 1998 through FY 2000 for seven high-volume clinical specialties: cardiology, family practice, general surgery, gynecology, internal medicine, obstetrics, and orthopedics. The wide variation in the MEDCEN cost for providing health care points out the need to improve the efficiency of peacetime care. Readiness requirements should be the primary consideration in establishing a minimum requirement for the number and mix of medical personnel. However, allocation decisions for resources above readiness requirements should be based on maximizing the efficiency of the MHS. Based on MEPRS data, the cost of providing similar health care appears to vary considerably among MTFs. Because personnel costs comprise more than one-half of the total MTF operating costs, we believe much of the difference in cost is attributable to the variation in the staff to the workload ratio. We did not perform a detailed review of individual MTF records to verify how much of the cost variation was attributable to an imbalance in the staff to the workload ratio. Following is a discussion of the variation in MEDCEN-reported inpatient and outpatient costs.

**Inpatient Care.** Significant variations exist in inpatient workload costs. We believe that the variations are attributable in part to a variation in workload and case complexity. However, comparison of the relative weighted product costs within each clinical specialty disclosed significant cost variations among MEDCENS with similar workload and case complexity. Some examples of the most significant cost variations are shown in Table 1.

**Table 1. MEPRS FY 2000 Inpatient Workload and Cost Data**

	<u>Episodes of Care (dispositions)</u>	<u>Case Mix Index</u>	<u>Cost per Relative Weighted Product</u>
<b><u>Internal Medicine</u></b>			
Walter Reed <sup>1, 7</sup> 81 <sup>st</sup> Medical Group <sup>2, 7</sup>	1,638 1,339	1.3357 1.3440	\$17,168 \$ 5,347
<b><u>Cardiology</u></b>			
William Beaumont <sup>3</sup> 60 <sup>th</sup> Medical Group <sup>4</sup>	395 81	1.3977 1.4098	\$ 8,296 \$24,131
<b><u>Obstetrics</u></b>			
Madigan <sup>5, 7</sup> National Naval Medical Center <sup>6, 7</sup>	1,760 1,930	0.5623 0.5633	\$ 6,512 \$14,431
<sup>1</sup> Walter Reed Army Medical Center (AMC) Washington, D.C.			
<sup>2</sup> Keesler Air Force Base (AFB), Mississippi			
<sup>3</sup> William Beaumont AMC, Texas			
<sup>4</sup> Travis AFB, California			
<sup>5</sup> Madigan AMC, Washington			
<sup>6</sup> National Naval Medical Center, Maryland			
<sup>7</sup> Graduate Medical Education program			

**Outpatient Care.** The complexity of ambulatory care varies significantly between small stand-alone outpatient clinics and outpatient clinics at large MTFs. As a result, the costs could vary significantly. Comparison of FY 1998 through FY 2000 visit costs for seven clinics common to most MEDCENs disclosed that MEDCENs are experiencing significant variation in outpatient visit costs. Examples of the variation in the cost for a MEDCEN outpatient clinical visit are shown in Table 2.

**Table 2. MEPRS FY 2000 Outpatient Workload and Cost Data**

	<u>Number of Visits</u>	<u>Cost Per Visit</u>
<b>Internal Medicine</b>		
William Beaumont <sup>1, 8</sup>	38,980	\$214.33
Walter Reed <sup>2, 8</sup>	40,499	\$368.24
59 <sup>th</sup> Medical Wing <sup>3, 8</sup>	31,026	\$422.86
<b>Cardiology</b>		
William Beaumont <sup>1</sup>	11,609	\$129.54
Naval Medical Center San Diego <sup>4, 8</sup>	11,456	\$306.21
Walter Reed <sup>2, 8</sup>	14,913	\$520.67
<b>Family Practice</b>		
Naval Medical Center Portsmouth <sup>5</sup>	25,879	\$187.34
60 <sup>th</sup> Medical Group <sup>6, 8</sup>	45,503	\$207.14
375 <sup>th</sup> Medical Group <sup>7, 8</sup>	17,218	\$303.23

<sup>1</sup>William Beaumont Army Medical Center (AMC), Texas

<sup>2</sup>Walter Reed AMC, Washington, D.C.

<sup>3</sup>Lackland Air Force Base (AFB), Texas

<sup>4</sup>San Diego, California

<sup>5</sup>Portsmouth, Virginia

<sup>6</sup>Travis AFB, California

<sup>7</sup>Scott AFB, Illinois

<sup>8</sup>Graduate Medical Education program

We realize that part of the variation in visit cost shown above may be attributable to variations in the acuity and complexity of outpatient visits. Because personnel costs make up more than one-half of the total MTF operating cost, we believe a portion of the difference may be attributable to an imbalance between staffing and workload.

**Inconsistent Implementation.** Implementation of the Optimization Plan by the Military Departments was inconsistent. To improve the productivity and cost efficiency of health care delivery, the ASD(HA) issued direction that required the lead agent of TRICARE Region 11 to implement the lead agent Pilot Project (Pilot Project) in conjunction with the Optimization Plan beginning October 1, 2000. Conceptually, each effort could improve the efficiency of health care delivery. However, even if fully implemented, neither the

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Optimization Plan nor the Pilot Project will provide the optimum location and combination of physician specialties needed to optimize TRICARE Region 11 and the overall MHS.

We visited five MTFs in TRICARE Region 11 during March 2001 to determine the status of the Optimization Plan implementation. Each MTF provided a presentation of ongoing optimization efforts, and as discussed in Appendix B, many ongoing localized efforts were outside of the Optimization Plan. Inconsistency existed in the implementation of the Optimization Plan PCM goals between the MTFs visited and their respective medical chains of command. In addition, considerable variation existed between MTFs in the enrollment for PCMs working in the same clinical specialty. Details are provided in Table 3, along with a discussion of the variation in each military medical department position and status in implementing the Optimization Plan.

**Table 3. Enrollee Data in TRICARE Region 11 by MTF  
As of February 28, 2001**

<u>Facility</u>	<u>Average Enrollees per PCM</u>
Madigan <sup>1</sup>	1,042
Naval Hospital Bremerton <sup>2</sup>	769
Naval Hospital Oak Harbor <sup>3</sup>	850
92 <sup>nd</sup> Medical Group <sup>4</sup>	1,244
62 <sup>nd</sup> Medical Group <sup>5</sup>	1,428

<sup>1</sup>Madigan Army Medical Center, Washington

<sup>2</sup>Bremerton Naval Air Station, Washington

<sup>3</sup>Oak Harbor Naval Air Station, Washington

<sup>4</sup>Fairchild Air Force Base (AFB), Washington

<sup>5</sup>McChord AFB, Washington

**Army.** Madigan Army Medical Center (AMC), Tacoma, Washington, personnel stated that they had not begun to incorporate the Optimization Plan into their clinic operations and the optimization efforts completed thus far at Madigan were locally initiated efforts. Madigan personnel further stated that because of the complexity of the primary care visits at Madigan and lack of support staff, it is not realistic to expect Madigan to achieve the Optimization Plan enrollment goals. The Commanding Officer pointed out that Madigan had

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lost 371 personnel in the last 6 years and did not have sufficient support staff to implement the Optimization Plan. The primary loss has been in registered nurses and licensed practical nurses, while the physician strength has remained essentially the same. Further discussion with staff personnel disclosed that Madigan is also experiencing significant support staff shortages in the intensive care unit, the operating room, anesthesiology, and inpatient medical surgery.

Discussion with the Army Medical Command officials disclosed the shortage of medical support staff is prevalent throughout the Army, and as a result, the Army has not begun to implement the Optimization Plan. The Army Medical Command identified its needs in a draft plan that agrees with the Optimization Plan goals, but states implementation of the Optimization Plan will require an additional \$43 million of funding annually to procure support staff and a one-time funding of \$27 million for exam room construction.

**Navy.** Bureau of Medicine and Surgery personnel stated that they are working to achieve the performance goals in the Optimization Plan, but have not issued specific direction to MTFs regarding implementation of the Optimization Plan. Instead, the Bureau of Medicine and Surgery has focused on providing MTFs with information and tools that can be used to assist MTFs to optimize performance. Bureau of Medicine and Surgery personnel also stated that PCMs perform too many non-patient care duties to meet the Optimization Plan PCM goals. PCMs in the Navy average only 1.31 support personnel and 1.29 exam rooms. The Bureau of Medicine and Surgery is attempting to increase the amount of support staff per PCM to make more time available for PCMs to treat patients. The Navy is in the beginning stages of attempting to re-allocate support staff on the basis of performance expectations.

Table 3 shows that the PCM beneficiary enrollment at the two Navy sites we visited was significantly below the Optimization Plan goal of 1,500. Discussions with Naval Hospital Bremerton, Washington, and Naval Hospital Oak Harbor, Washington, personnel disclosed that they did not agree with the performance goals in the Optimization Plan. Each site developed its own PCM model. Naval Hospital Bremerton determined its average enrollment for each PCM was 769, and that its PCMs would have to work an 82-hour week to achieve the Optimization Plan goal of 1,500 enrollees for each PCM. Naval Hospital Oak Harbor determined that the maximum enrollment it could achieve was 950 for each PCM.

Personnel at Naval Hospital Bremerton and Naval Hospital Oak Harbor stated that the Optimization Plan did not fully consider real world variables that affect the enrollee-provider goal. For example, the Optimization Plan did not contain an accurate measure of how much time each physician spent on non-patient care functions. Non-patient care functions include residency training and administrative duties such as data entry. Personnel at Naval Hospital Bremerton developed a model to determine the amount of time that the medical staff spends on non-patient care functions. Based on the Naval Hospital Bremerton model, approximately 40 percent of PCM time is spent on non-patient care functions. The Naval Hospital Bremerton model showed that the PCM enrollment capacity could be increased to 1,573 if the PCM non-patient time were reduced from 40 percent to 10 percent. However, Naval Hospital Bremerton personnel noted

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that many of the factors that impact PCM non-patient care time, such as residency training, are beyond MTF control. The Naval Hospital Bremerton model also pointed out that the lack of support staff and operating space negatively impacted command ability to work efficiently. The average support staff for Naval Hospital Bremerton PCMs in February 2001 was 1.24, a figure significantly below the Optimization Plan's PCM support staff target of 3.5.

**Air Force.** Despite the emphasis and contractor support provided in TRICARE Region 11, only the McChord AFB, Tacoma, Washington, Clinic was close to meeting the Optimization Plan goal of 1,500 enrollees for each PCM. To meet the MHS Optimization Plan goal for PCMs, McChord Clinic personnel stated that they reduced the number of PCMs from 10 to 7 and increased the visits for each PCM from 10 to 12 a day to 24 to 25 a day. Fairchild AFB, Spokane, Washington, Clinic personnel indicated that they planned to achieve the enrollment goal of 1,500 per PCM by exceeding 1,500 enrollees for Family Practice and Pediatrics and increasing Internal Medicine enrollees to 1,000. To achieve the goal, Fairchild Clinic personnel performed a business case analysis. Based on that analysis, the Fairchild Clinic closed its Ambulatory Surgery Unit in March 2001. The closure of the unit resulted in realigning 11 enlisted personnel, 1 civilian employee, and 2 officers locally to fill support staff positions. The closure of the Ambulatory Surgery Unit also resulted in the transfer of five officers to other Air Force MTFs, which the Fairchild Clinic estimated would save \$332,140 annually. Although the ambulatory clinic closed, the Fairchild Clinic maintained two ambulatory surgeons on staff who will continue to perform ambulatory surgeries on military personnel using civilian facilities and support staff. The use of civilian facilities will enable the surgeons to maintain their skills and satisfy most of the local demand for ambulatory surgery. It is important to note that both of the Air Force Clinics went beyond optimizing existing staff. Each clinic made tough decisions to reduce the staff to what was needed to cost effectively and efficiently satisfy existing workload. That type of optimization approach should be incorporated into the plan and applied on an MHS-wide basis.

Review of the Air Force Surgeon General web site and discussions with the McChord and Fairchild Clinics disclosed that the Air Force originated the Optimization Plan PCM enrollment goals. In addition, the Air Force has required MTFs to work toward meeting the goals for more than 2 years and to prepare monthly reports that show the status in meeting the Optimization Plan goals. Since March 1, 2000, the Air Force MTFs report by way of an interactive web site and visibility is available to anyone with access to the site. Although many MTFs still have not achieved the goals, we believe the Air Force Surgeon General's support and monitoring of the goal will result in improvement in this area.

**Lead Agent Pilot Test.** TMA realized that to satisfy health care demand more cost effectively, increased regional control over health care resources was needed. On October 1, 2000, the TMA began a 2-year project to evaluate the role of a strengthened lead agent in the regional management of the MHS. Lead agent responsibilities were expanded to include developing innovative practices that optimize regional resources along with developing a regional plan for managing MHS regional resources and implementing the tenets of population

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health. We applaud this effort, however, implementation of the regional plan with respect to reallocating MTF funding and personnel, was voluntary because the TMA did not have the authority to empower the lead agent with the authority to direct changes in those areas.

Discussion with the TRICARE Region 11 lead agent staff disclosed that they were not reviewing the MTF PCM workloads to identify PCM excesses and shortages because under the Pilot Project the lead agent did not have the authority to shift personnel between the Military Departments. The lead agent stressed the need to centralize personnel distribution and that savings could be realized through increased sharing and redistribution of medical personnel to match skills and supply with demand. As discussed previously, under the MHS organization, each Military Department independently allocates medical personnel within their respective chains of command. No incentives, methodology for identifying opportunities, or requirements exist for the Military Departments to share health care resources.

The lead agent developed a conceptual plan for implementing the Pilot Project. The plan states that centralizing the management of funds and personnel at the regional level would provide the lead agent with total asset visibility for MHS expenditures. Centralized management would allow the lead agent to make the appropriate adjustment for market surpluses and deficits in the purchased care. In addition, the lead agent could shift personnel between MTFs to better match regional skills to regional needs. We agree and believe that even greater savings could be gained if medical funding and personnel are managed on a DoD-wide integrated basis. Limited sharing of physicians between MTFs has been ongoing for years on an informal basis (see discussion of the circuit riders and Surgical Care Optimization/Realignment Team in Appendix B). No ongoing efforts are present at the regional or DoD level to match peacetime health care requirements to the MHS capabilities disregarding the Military Department affiliation of medical personnel and medical funds. The following sections discuss the need for an MHS-wide methodology for allocating personnel and the importance of establishing appropriate metrics for measuring productivity throughout the MHS. The metrics would identify cost and productivity saving opportunities through increased performance and sharing of health care personnel among Military Departments.

## **Allocation of Health Care Providers**

DoD lacks a comprehensive method for allocating medical personnel across the MHS to meet the health care peacetime requirements. Each Military Department allocates health care providers to its MTFs using a Military Department-unique model. Although some sharing of resources among Military Departments takes place at the MTF level through informal arrangements, total MHS requirements are not considered when resources are allocated to the MTFs. Without an analysis that identifies DoD-wide solutions to total health care requirements, the most cost-effective distribution of health care providers for peacetime health care will not be realized. Physician skills are also enhanced when they are more fully utilized.

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Readiness requirements are Military Department specific and are the initial consideration when allocating health care providers. To determine MTF peacetime health care provider requirements, the Air Force uses an automated model based on population. The Army also has an automated model that uses workload to determine the number of health care providers required for each MTF. The Navy determines MTF peacetime health care requirements by performing onsite reviews, which include analysis of workload data, and applying staffing standards. Because the peacetime health care mission is not Military Department dependent, cost effectiveness and increased productivity should be a key determinate for peacetime medical assignments. We believe a comprehensive tri-Service method for allocating medical personnel across the MHS would enable DoD to improve the productivity and cost effectiveness of peacetime health care delivery.

Informal arrangements among nearby MTFs to share personnel were developed in the absence of an integrated MHS-wide approach to match requirements with assets across Military Department lines. In TRICARE Region 11, a circuit rider initiative was developed to prevent workload from going to civilian providers by sharing military physicians between MTFs within the region. We found that the sharing was minimal and confined to sharing one physician with three MTFs. We applaud the attempt at crossing Military Department lines to improve cost efficiency at the local level. To truly optimize the MHS for the peacetime health care mission, a methodology for distributing DoD healthcare personnel regardless of Military Department affiliation should be standardized and expanded across the MHS.

## **Productivity and Efficiency Metrics**

Productivity and efficiency metrics have not been developed to assist in allocating medical personnel or to measure the success of optimization efforts. The only measure included in the Optimization Plan is the goal of 1,500 enrollees for each PCM. Many MHS metrics exist that measure the quality of health care delivery and beneficiary wellness. In addition, the MHS captures and maintains extensive cost and workload data. No criteria has been applied to the data that establish productivity metrics for measuring the cost efficiency and productivity of the MHS. An absence of uniform productivity metrics prevents comparison of health care delivery between MTFs, as well as the civilian sector, with a goal of identifying efficient and inefficient operations. An absence of productivity metrics also prevents establishment of any productivity standards needed for allocating medical personnel on a consistent basis throughout the MHS.

The Optimization Plan goal of 1,500 enrollees for each PCM was a step toward establishing an integrated productivity measure. However, the larger MTFs visited criticized the 1,500 enrollee goal because the MTFs frequently provided care to an older population with complex health care problems, which significantly reduced the number of daily visits and enrollees a PCM could handle. We agree that a measure that takes the complexity of care into consideration is necessary when establishing productivity metrics.

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We also believe that measuring productivity in all areas of health care delivery is necessary. The Optimization Plan establishes goals for PCMs operating outpatient primary care clinics but does not establish any goals or metrics for physicians providing inpatient care. Inpatient care consumes more than 20 percent of the MHS direct-care resources.

Because MTFs do not maintain patient-level accounting records, the actual cost of an episode of care cannot be fully identified in the MHS. However, MEPRS is the only cost accounting system common to all of the MTFs and provides a means of comparing MTF health care costs on a cost center work unit basis. Although MEPRS was established so MTF costs and productivity could be compared, personnel throughout the MHS have stated that comparison of MTF MEPRS data is inappropriate because of data inaccuracies and variations in Military Department implementation of MEPRS.

TMA personnel indicated that they are looking into assigning weighted factors to account for the acuity level of outpatient visits similar to the inpatient case mix indexes discussed in the background section of this report. Discussion with Air Force Surgeon General personnel disclosed that in April 2001, Air Force MTFs began reporting relative value units for outpatient visits to an Air Force web site to account for visit acuity. TMA personnel indicated the other Military Departments are considering assigning relative value units to outpatient visits. Assigning relative value units, or a similar weighted factor, to outpatient visits would be a major step toward measuring and comparing the productivity and cost efficiency of outpatient care between MTFs. Until TMA and the Military Departments agree on the methodology for assigning weighted factors to outpatient procedures, we believe that using MEPRS cost per MTF visit would provide a useful metric for measuring MTF outpatient cost efficiency.

## **Need for MHS Personnel Allocation Methodology**

TMA developed a PCM goal as a first step toward establishing DoD-wide medical performance metrics to optimize the MHS. However, the effort is limited because the Optimization Plan is focused on optimizing medical personnel where the personnel are currently assigned and does not evaluate where the personnel should be assigned to best serve the MHS. As a result, the Optimization Plan may not optimize the MHS. To fully optimize medical personnel, the MHS needs a personnel allocation methodology that identifies and takes advantage of the MHS productivity and cost efficiency opportunities. The Office of the ASD(HA) could facilitate a more MHS-focused approach by establishing MTF inpatient and outpatient clinical specialty productivity metrics applicable to all of the MTFs. MEPRS is a source for much of the workload and cost data needed for productivity metrics.

Even with a consistent methodology, complete MHS optimization will not be realized until personnel allocation decisions can be made on an MHS-wide basis. The Under Secretary of Defense for Personnel and Readiness should determine the best organizational structure for implementing the allocation process. In

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summary, we believe DoD peacetime health care could be delivered more effectively and efficiently if the focus of resource allocation were on optimizing the MHS rather than individual MTFs.

## **Recommendations, Management Comments, and Audit Response**

**We recommend that the Under Secretary of Defense for Personnel and Readiness, in conjunction with the Assistant Secretary of Defense (Health Affairs):**

- 1. Determine the best Military Health System organization structure for implementing a Military Health System-wide personnel distribution process.**

**Assistant Secretary of Defense (Health Affairs) Comments.** The ASD(HA), responding for DoD, concurred and stated that DoD, TMA, and the Military Departments will establish a forum to formally collaborate and seek opportunities to share available medical staffing.

**Military Department Comments.** Although not required to comment, the Army stated that improving personnel distribution should be approached by an inter-Service working group. The Navy agreed with the recommendation and stated that the Service must be able to balance peacetime staff with operational requirements. The Air Force Surgeon General agreed in theory with the recommendation, but stressed that individual Service-unique requirements need to be considered. The Air Force Deputy Surgeon General disagreed with the recommendation and stated that the MHS structure does not need to change, but agreed that a better distribution plan with improved collaboration and cooperation would facilitate better execution of the Optimization Plan.

**Audit Response.** Although the ASD(HA) did not address organizational changes, we consider the comments fully responsive. The ASD(HA) agreed to establish of a forum whereby the Military Departments could collaborate on the sharing of medical staffing. The action satisfies the intent of the recommendation.

- 2. Revise the Military Health System Optimization Plan to:**

- a. Include a Military Health System-wide methodology for allocating medical personnel during peacetime, regardless of Military Department affiliation, to achieve maximum efficiency and productivity.**

**Assistant Secretary of Defense (Health Affairs) Comments.** The ASD(HA) concurred and stated that DoD, TMA, and the Services will update the Optimization Plan to support development of a tri-Service methodology to ensure that medical assets are considered on a local, regional, and national level for the distribution of MTF military provider assets. The ASD(HA) added that the methodology must acknowledge the individual Service readiness and

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operational requirements and, once those requirements are met, other considerations may drive an optimal distribution plan. Considerations include peacetime business case analysis, Graduate Medical Education or research, and sufficient population areas to maintain adequate military provider competency levels. Business case analysis may support the decision to fill one Service's need with another Service's provider, if available, to minimize the global MHS cost of purchased care.

**Military Department Comments.** The Army stated that the recommendation is unworkable and that inter-Service cross-leveling is already established through an ad hoc process. The Navy agreed with the recommendation and stated that although Services should have the final placement authority, cooperative efforts to match medical assets to population needs are feasible. The Air Force Surgeon General agreed in theory, with the caveat that Service-unique readiness requirements need to be considered. The Air Force Deputy Surgeon General disagreed and stated that allocation should be based on readiness.

**Audit Response.** The ASD(HA) comments are fully responsive. The report clearly states that readiness requirements are the initial consideration for staffing decisions. We identified that although the tri-Service readiness model had not yet been developed, facility optimization was underway. We believe the development and implementation of a tri-Service methodology to allocate medical providers would not exclude Service-unique readiness and operational requirements, but add a mechanism to enhance the sharing of medical personnel to address peacetime medical requirements. Within readiness requirements, identifying the best location for medical providers would enhance the benefits from optimizing the MTFs.

**b. Establish metrics, such as clinical specialty relative weighted product costs, for measuring the effectiveness and efficiency of Military Health System staffing and resources, and for measuring the success of the Optimization Plan.**

**Assistant Secretary of Defense (Health Affairs) Comments.** The ASD(HA) concurred and stated that DoD is moving toward adopting the relative value unit as a weighted work measure of complexity and costs for episodes of outpatient care. The MHS Metrics Standardization Configuration Board, which has representatives from the three Services, will determine the standard method for calculating the measure in the MHS. Also, the Tri-Service Metrics Workgroup is charged with determining appropriate metrics for determining success in meeting all MHS Optimization goals.

**Military Department Comments.** The Army and Navy agreed that common metrics are needed for meaningful comparisons across DoD. The Air Force Surgeon General and Deputy Surgeon General agreed with the recommendation but stated that integration among various metric workgroups needs to take place to arrive at standard tri-Service metrics.

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## **Appendix A. Audit Process**

### **Scope and Methodology**

**Work Performed.** The audit reviewed the MHS Optimization Plan and the allocation of health care providers within the MHS. We interviewed members of the MHS optimization team, made up of personnel from TMA and the Military Department Surgeons General.

We attended Defense Medical Oversight Committee meetings and reviewed contractor-prepared presentations on alternative MHS organizational structures and alternative methods to purchase civilian health care.

We visited the lead agent, five MTFs, and the regional managed care support contractor in TRICARE Region 11. We analyzed documentation applicable to the PCMs at the MTFs and obtained outpatient clinic appointment data. We also discussed and reviewed regional and MTF optimization initiatives developed locally. We interviewed lead agent and MTF personnel regarding the implementation status of the Optimization Plan and Pilot Project.

We analyzed FY 1998 through FY 2000 MEPRS inpatient and outpatient cost and workload data for 7 Clinical Specialties for 16 MEDCENs.

**High-Risk Area.** The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the DoD Infrastructure Management high-risk area.

**Use of Computer-Processed Data.** We did not assess the reliability of computer-processed data extracted from the MEPRS. We acknowledged management's concern over the accuracy of the system. Accordingly, we did not rely extensively on MEPRS data and presented data only as a broad anecdotal indicator. Not assessing the reliability of the system does not affect the results of the audit because the finding is based on risks associated with policy decisions on the implementation of the Optimization Plan and not specific data included in the system.

**Audit Type, Dates, and Standards.** We performed this program audit from October 2000 through August 2001 in accordance with generally accepted government auditing standards.

**Contacts During the Audit.** We visited or contacted individuals and organizations within and outside of DoD. Further details are available on request.

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## **Management Control Program Review**

DoD Directive 5010.38, "Management Control (MC) Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Because the Optimization Plan was in the early implementation phase, the Optimization Plan had not been in place sufficient time for management controls to be evaluated. Additionally, ASD(HA) had not defined the optimization effort as an assessable unit.

### **Prior Coverage**

During the last 5 years, the General Accounting Office issued one report discussing the need for a comprehensive tri-Service strategy for determining and allocating medical resources among MTFs. Unrestricted General Accounting Office reports can be accessed over the Internet at <http://www.gao.gov>.

### **General Accounting Office**

General Accounting Office Report No. HEHS-00-10, "Defense Health Care: Tri-Service Strategy Needed to Justify Medical Resources for Readiness and Peacetime Care," November 1, 1999

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## **Appendix B. TRICARE Region 11 Initiatives**

The TRICARE Region 11 lead agent and many of the MTFs visited had initiatives that are not part of the Optimization Plan. The local initiatives were developed to improve operational efficiencies as well as save funds. Below are some examples of the local initiatives.

**Surgical Care Optimization/Realignment Team.** The Surgical Care Optimization/Realignment Team develops opportunities to shift surgical cases from Madigan AMC to Naval Hospital Bremerton. The team initially focused on outpatient procedures that could be performed by Madigan surgeons at Naval Hospital Bremerton. The team identified surgical backlogs at Madigan and matched the medical specialties with Naval Hospital Bremerton capabilities. The Surgical Care Optimization/Realignment Team concluded that the greatest potential for recapture of funds appears to be in orthopedic surgery, especially for total joint replacement and arthroscopy patients. Four total joint replacements have been performed at Naval Hospital Bremerton on patients referred from Madigan that would have otherwise been sent to civilian providers.

**Pharmacy Incentive Agreement.** This regional pharmacy initiative standardized the types and costs of drugs stocked at all of the pharmacies within the region. The TRICARE Region 11 lead agent estimated the initiative has resulted in savings of \$38,321 in October 2000, \$46,592 in November 2000, and \$154,837 in December 2000. The lead agent projected additional savings of \$850,000 for the remainder of FY 2001.

**Registered Nurse Triage.** At the 92<sup>nd</sup> Medical Group, Fairchild AFB, a registered nurse answers phones calls and makes the decision whether a visit is needed. Many unnecessary visits are avoided because the registered nurse provides the patient with guidance on what the patient should do at home.

**Ambulatory Surgery Unit.** Effective March 1, 2001, the 92<sup>nd</sup> Medical Group, Fairchild AFB, closed the Ambulatory Surgery Unit because of under utilization. An in-house business case analysis on closing the Ambulatory Surgery Unit showed projected savings of about \$330,000 annually.

**Prime Health Center.** Naval Hospital Oak Harbor has changed appointment procedures and dedicates blocks of time specifically for performing Pap-smear tests at the Prime Health Center. The change has improved the processing of patients through the clinic and the quality of appointments.

**Independent Duty Corpsmen.** Naval Hospital Oak Harbor initiated efforts to increase operational efficiencies by having independent duty Corpsmen perform patient screening, freeing up time for the PCM to see more patients.

**Specialty Workload.** Naval Hospital Oak Harbor initiated an effort to reduce referrals to civilian specialists by stressing that civilian PCMs forward referrals to military specialists rather than civilian specialists.

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## **Appendix C. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense (Comptroller)  
Deputy Chief Financial Officer  
Deputy Comptroller (Program/Budget)  
Under Secretary of Defense for Personnel and Readiness  
Assistant Secretary of Defense (Health Affairs)

### **Department of the Army**

Assistant Secretary of the Army (Financial Management and Comptroller)  
Auditor General, Department of the Army

### **Department of the Navy**

Naval Inspector General  
Auditor General, Department of the Navy

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Auditor General, Department of the Air Force

### **Non-Defense Federal Organization**

Office of Management and Budget

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## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform

House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform

House Subcommittee on Technology and Procurement Policy, Committee on Government Reform

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## Assistant Secretary of Defense (Health Affairs) Comments



### THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1200

#### HEALTH AFFAIRS

NOV 15 2001

Shelton R. Young  
Director, Readiness and Logistics Support Directorate  
Inspector General  
Department of Defense

Dear Mr. Young:

This is the Department of Defense (DoD) response to the Department of Defense Inspector General draft of the proposed "Audit Report on the Military Health System Optimization Plan" dated August 29, 2001 (Project No. D2001LF-0043).

DoD acknowledges receipt of the Inspector General's proposed audit report and generally concurs, with some qualification, with the overall report, findings and recommendations. DoD agrees that an MHS-wide medical personnel distribution methodology, which would view demand for healthcare services from a tri-Service integrated health system perspective, would enhance our optimization efforts to more efficiently utilize manpower resources. However, this concurrence is qualified in that DoD recognizes that individual Service doctrine drives Service unique readiness and operational requirements to meet our primary mission of national defense. These requirements must take precedence during any tri-Service based deliberations to determine the optimal distribution of medical personnel to deliver our peacetime healthcare mission.

DoD also agrees that MHS-wide adoption of relative weighted product cost metrics to report workload will improve resource management decisions in the MHS.

The DoD, TMA, and the three Services will pursue implementation of the audit recommendations, subject to the qualification above, as we continue our long-term strategies to optimize the MHS to achieve a world-class health system for our nation's military heroes and their families.

Specific DoD responses to the Inspector General's proposed draft audit report and its recommendations, as well as Service specific responses, are attached. Please feel free to direct any questions to my project officer on this matter, Captain John R. Aguilar at (703)681-0064.

Sincerely,

William Winkenwerder, Jr., MD

Enclosures:  
As stated

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IG Draft Audit Report – Dated 29 August 2001  
(D2001LF-0043)

Inspector General (IG) Draft Audit Report  
“Military Health System Optimization Plan”

Department of Defense Comments to the Recommendations

**Recommendation 1:** “We recommend that the Under Secretary of Defense for Personnel and Readiness, in conjunction with the ASD(HA) determine the best Military Health System organization structure for implementing a Military Health System-wide personnel distribution process.”

**DoD Response:** Concur. DoD concurs in the formation of a Military Health System-wide process that would provide a methodology and forum whereby the three Services can meet to formally collaborate and seek opportunities to share available medical manpower resources, should this be the best course of action, to achieve an optimal distribution of our military medical assets. This approach must acknowledge that individual Service doctrine dictates unique readiness and operational requirements, which must be met by staffing operational platforms, and other specified readiness billets first. Once these requirements are met, other considerations may drive an optimal distribution plan. Some of these other considerations may be a peacetime business case analysis, the Graduate Medical Education or research mission, and the location of sufficient patient populations to support competency maintenance for our military providers and their support personnel. In our current optimization efforts to achieve a more cost-effective integrated healthcare delivery system, through enhanced regional management, we must view all area MTF based medical assets together when considering the manpower resources needed to meet the medical needs of an area patient population. This is especially true if this patient population is located in widely overlapping catchment areas, where that patient population supports only a finite number of providers for best utilization. On the other hand, if there is large peacetime demand which a particular Service cannot meet, then a business case analysis may support the decision for filling this need with another Service’s provider, if available, to minimize the global MHS cost of purchased care.

DoD, TMA, and the Services will pursue the creation of a methodology and forum to allow organized tri-Service deliberations for the distribution of provider assets.

**Recommendation 2.a:** “We recommend that the Under Secretary of Defense for Personnel and Readiness, in conjunction with the ASD(HA) revise the Military Health System Optimization Plan to include a Military Health System-wide methodology for allocating medical personnel during peacetime, regardless of Service affiliation, to achieve maximum efficiency and productivity.

**DoD Response:** Concur, with qualification. While DoD supports tri-Service coordination and collaboration for the distribution of medical personnel, especially in sharing critically short specialists, DoD qualifies this response with the position that our Service unique operational and readiness requirements must take precedence in the peacetime distribution of medical assets through respective Service manpower and personnel allocation systems. However, a tri-Service forum whereby collaboration could take place on a formal basis would offer a unique opportunity to view all Services' assets and needs in a particular geographic region and across the MHS. This would allow due consideration of meeting those needs with appropriate visibility of all military provider assets in the geographical area of interest, and could lead to consideration of inter-Service assignments to make best use of critically short military specialists, if readiness requirements can still be met. In addition to considering the best business case for distribution decisions, the basis for sharing critically short specialists may be maintaining currency of wartime clinical skills if one Service offers a greater patient base that can meet this need.

DoD, TMA, and the Services will update the MHS Optimization plan to support development of a tri-Service methodology and forum to ensure that tri-Service medical assets are considered on a local, regional, and national level for the distribution of MTF military provider assets.

**Recommendation 2.b:** "We recommend that the Under Secretary of Defense for Personnel and Readiness, in conjunction with the ASD(HA) revise the Military Health System Optimization Plan to establish metrics, such as clinical specialty relative weighted product costs, for measuring the effectiveness and efficiency of Military Health System staffing and resources, and for measuring the success of the Optimization Plan."

**DoD Response:** Concur. DoD concurs in the need to establish uniform metrics that are intensity adjusted relative weighted products that determine complexity and costs for episodes of outpatient care to allow comparability of outpatient workload and cost. This will allow managers to make improved manpower and other resource distribution decisions based on comparing more accurate workload and cost metrics over time and between MTFs.

DoD is moving rapidly towards adoption of the Relative Value Unit (RVU) as a weighted work measure and will be reporting this in our MHS Executive Summary (MHSES) metrics by January 2002. The Air Force has been using the RVU to report their workload for a year. The MHS Metrics Standardization Configuration Board, which has representatives from the three Services, will determine the standard method for calculating this metric in the MHS. In addition, the Tri-Service Metrics Workgroup is charged with determining appropriate metrics for determining success in meeting all MHS Optimization goals.

Please note that in the Executive Summary, the Reengineering Coordination Team (RCT) composition is erroneously reported but this is corrected in paragraph three on page one of the report.

Revised

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## Department of the Army Comments



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
OFFICE OF THE SURGEON GENERAL  
5109 LEESBURG PIKE  
FALLS CHURCH VA 22041-3258



MCIR (36-5c)

01 NOV 2001

MEMORANDUM THRU Assistant Secretary of the Army (Manpower & Reserve Affairs), Pentagon, Washington, DC 20310-0111

FOR Assistant Inspector General for Auditing, Office of the Inspector General, Department of Defense, 400 Army Navy Drive, Room 801, Arlington, VA 22202

SUBJECT: DODIG Draft Audit Report on "Military Health System Optimization Plan, August 29, 2001" (Project No. D2001LF-0043)

1. We appreciate the opportunity to comment on this report. Our comments are enclosed.
2. The POCs for this action are COL Glenn Mitchell, DSN 471-6516, Commercial 210-221-6516/6616, or Mr. James Hicks, DSN 761-3248, Commercial 703-681-3248.

FOR THE SURGEON GENERAL:

Encl

PATRICK D. SCULLEN  
Major General  
Deputy Surgeon General

Printed on Recycled Paper

Comments on DODIG Draft Audit Report  
*"Military Health System Optimization Plan*  
Project No. D2001LF-0043"

12 October 2001

1. Global: This report is focused on peacetime health care goals to the exclusion and detriment of our readiness and wartimes missions. The continuum of training and the speed with which transitions need to be made between peacetime health care readiness and wartime mission militate against this general approach. Improved metrics, however, would be welcomed, although the specifics mentioned in the report are unlikely to be optimal.

2. Comments regarding specific recommendations:

a. Recommendation 1: This methodology for improving personnel distribution to cross-level various specialties should be approached by an interservice working group (see Recommendation 2a below).

b. Recommendation 2a: This is unworkable. The general process of interservice cross-leveling is already an established, if ad hoc, process. It is this established working relationship among Consultants that could possibly benefit from a more structured approach, not an MHS-directed process disregarding Service needs for readiness.

c. Recommendation 2b: There is general agreement that weighted metrics must be used to make valid and meaningful comparisons across the varied environments of care available inside DoD MTFs. RWP methods can be used as an interim metric, but these still use past performance as a measure of 'success' when the goal is a population based system of care. A better suggestion may be to establish a Working Group to agree on such population metrics and set these as system metrics to drive performance.

3. The POC for this action is COL Glenn Mitchell, Chief, Clinical Services Division, Health Policy & Services Directorate, U.S. Army Medical Command, 210-221-6516/6616, DSN 471-6516.

# Department of the Navy Comments



DEPARTMENT OF THE NAVY  
BUREAU OF MEDICINE AND SURGERY  
2300 E STREET NW  
WASHINGTON DC 20372-5300

IN REPLY REFER TO

5420  
Ser32/01U114000853  
01 November 01

## MEMORANDUM FOR THE ASSISTANT SECRETARY OF DEFENSE HEALTH AFFAIRS

SUBJECT: INSPECTOR GENERAL AUDIT REPORT ON THE MILITARY HEALTH SYSTEM OPTIMIZATION PLAN (PROJECT NO. D2001LF-0043)

Thank you for the opportunity to comment on the draft report on the Military Health System (MHS) Optimization Plan. As outlined below, I concur with the recommendations related to MHS-wide personnel distribution and to the recommendation regarding metrics. However, I would like to offer comments on both issues.

Specifically, I concur with the recommendations "Determine the best Military Health System organization structure for implementing a Military Health System—wide personnel distribution process" and "Revise the Military Health System Optimization Plan to include a Military Health System-wide method for allocating medical personnel during peacetime regardless of service affiliation to achieve maximum efficiency and productivity." However, we concur with one caveat, we must be able to balance our peacetime staffing with our operational requirements. Unlike other services, a full one-third of the Navy is deployed at any given time. Thus, our operational requirements continue to exist, even during times of peace.

I recognize the Military Health System Optimization Plan (MHSOP) describes the rationale for supporting the two "symbiotic" missions of readiness and the health benefit, but a delicate balancing act is necessary for sustaining both. While the multifaceted plan outlines eight component tasks to achieve its vision, it emphasizes the precedence of medical support for Service missions. Development of an MHS-wide method for allocating medical personnel during peacetime would reverse the order of precedence and though such a method might enhance peacetime resource efficiencies, it would entail an unacceptable readiness cost. Because of the unique readiness requirements of the Navy, this cost is untenable.

To that end, Navy Medicine strongly advocates distributing staff based on Service specific factors, placing priority on operational and garrison operational support missions, followed by military treatment facility (MTF) size, location and demographic demands of catchment area populations. Recent events demonstrate the quick transition needed to a wartime posture and the importance of a ready and readily available medical staff to national defense.

Navy Medicine does, however, support local, regional and MHS optimization efforts to more effectively utilize medical personnel. While Services have final placement authority, cooperative efforts to match medical assets to population needs are feasible. Early efforts in Region 11 and elsewhere show promise, but highlight the need for a Tri-Service manpower and personnel management system that allows central review of manpower requirements,

**SUBJECT: INSPECTOR GENERAL AUDIT REPORT ON THE MILITARY HEALTH SYSTEM OPTIMIZATION PLAN (PROJECT NO. D200ILF-0043)**

identification of personnel and their skills, and documentation of time away from the health care delivery mission. A Tri-Service manpower and personnel management system would facilitate prospective vice retrospective assignment review and order modifications where authorized by parent Services.

I concur with the recommendation to "Revise the Military Health System Optimization Plan to Establish metrics, such as clinical specialty relative weighted product costs, for measuring the effectiveness and efficiency of Military Health System staffing and resources, and for measuring the success of the Optimization Plan." Common, MHS-wide performance measures are needed to align, motivate and focus optimization efforts. Performance measurement, however, must be balanced to assess readiness, quality and population health, as well as cost and productivity. Navy Medicine's Optimization Report card provides trend information on six elements: Enrollment, Capacity, Utilization, Private Sector Care, Productivity and Satisfaction. There is an Optimization Report Card for each naval military facility; an overall Navy Medicine Report Card is also available.

Performance assessment should address catchment or regional health care costs as well as productivity, including potential cost shifting or migration of expensive care away from the MTF. Productivity assessments must account for service differences in availability of personnel; facilities with multiple missions admixed in their requirements to provider time cannot be compared to facilities with straightforward single health care missions. Also, a service level assessment which captures both MTF and non-MTF personnel may provide additional resource visibility.

In conjunction with MHS-wide performance measures, an agreed upon management control process for review, analysis, recommendations and follow-up is needed to fully leverage the myriad of MHS and Service specific metrics and management tools. Agreed upon measures and methodologies for assessing progress will ensure "a level playing field" and consistent operational definitions for facility and Service comparisons.

I support DoD IG's plan to study clinical specialty cost variation and recommend that the study include detailed review of MEPRS cost elements; concern persists regarding the consistent application of MEPRS among the Services and between facilities. The MEPRS Management Improvement Group (MMIG) has recommended to Health Affairs TRICARE Management Activity (HA/TMA) enhancements to DoD clinical systems to improve the collection and reporting of workload data to MEPRS. Improved automation of the HA/TMA workload reporting requirements will increase the uniformity and consistency of MEPRS data reported and used for analysis. Also of note, under the Data Quality Management Program, the Commanding Officer of the MTF signs monthly Data Quality Statements to acknowledge responsibility for the clinical and workload data. MTF Data Quality Assurance Teams perform inpatient and outpatient workload and FTE reconciliation activities and MTF resource managers perform monthly financial reconciliation activities between Service official accounting systems and MEPRS/EAS.

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SUBJECT: INSPECTOR GENERAL AUDIT REPORT ON THE MILITARY HEALTH SYSTEM OPTIMIZATION PLAN (PROJECT NO. D2001LF-0043)

Although the Primary Care Manager (PCM) to enrollee ratio is an important indicator, it must be evaluated in conjunction with PCM support (both staff and facilities) as well as Readiness, Graduate Medical Education and other mission requirements. Navy Medicine expects the Primary Care Optimization Model (PCOM) to improve enrollment capacity review. The PCOM, a web-based reporting and analytical tool, brings together corporate level data and MTF data. Information retrievable from the PCOM includes: enrollees per PCM Full Time Equivalent, exam rooms per PCM, support staff per PCM and the number of patients seen per day per PCM.

I appreciate also the opportunity to mention Navy Medicine's optimization efforts. Navy Medicine adopted the MHSOP in late 1999. Initial efforts included identification of optimization champions at each MTF, quarterly conferences to educate, motivate and promote best business networking, development of data management tools, and periodic reports by facilities to describe optimization efforts. Navy Medicine considers its introduction of this complex reengineering initiative a success and is proud of the numerous local "Most Effective Organization" initiatives. Second phase implementation plans are currently in progress and will focus attention on increasing direct care capabilities and achieving workload performance targets.



M. L. COWAN

## Department of the Air Force Comments



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON DC

NOV 14 1991

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS)

FROM: HQ USAF/SG  
110 Luke Ave, Room 400  
Bolling AFB, DC 20332-7050

SUBJECT: AFMS Response to HA letter

I have reviewed the proposed response to the Department of Defense Inspector General's "Audit Report on the Military Health System Optimization Plan." I agree in concept with the memorandum. However, I have two specific concerns.

The recommendation that "DoD, TMA, and the Services pursue the creation of a methodology and forum to allow organized Tri-Service deliberations of provider assets, and that the MHS Optimization Plan be updated to ensure that medical assets (military providers) are considered on a local, regional, and national level for distribution to the MTP," is in theory appropriate. However, I am uncertain as to how this will be accomplished without consideration for individual Service's unique readiness requirements. Potentially, maldistribution could adversely affect the ability of the individual Services' medical departments to support their line missions. This is particularly important to AFMS support of the Air Expeditionary Force.

The AFMS has used the Relative Value Unit (RVU) to report its workload for the past year. The MHS Standardization Configuration Board composed of Tri-Service representatives is responsible for determining methodology for RVU calculations. Additionally, the Tri-Service Metrics Workgroup determines the metrics used in measuring progress towards our MHS Optimization goals. However, multiple other metric groups exist. My concern is the integration of these workgroups into a single function whose purpose is the development of a corporate strategy, able to provide reproducible results.

I appreciate the opportunity to review the proposed memorandum and offer my comments. My point of contact is Col Sean L. Murphy at (202) 767-4269, DSN 297-4269, or e-mail [sean.murphy@usafsg.bolling.af.mil](mailto:sean.murphy@usafsg.bolling.af.mil).

*Paul K. Carlton Jr.*  
PAUL K. CARLTON, JR.  
Lieutenant General, USAF, MC, CPS  
Surgeon General



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS, UNITED STATES AIR FORCE  
WASHINGTON, D.C.

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS)

FROM: HQ USAF/SG  
110 Luke Ave, Room 400  
Bolling AFB, DC 20332-7050

SUBJECT: AFMS Response to DoD Inspector General (IG) Draft Report on the Military Health System Optimization Plan (Project N. D2001LF-0043)

I have reviewed this report and offer comments on the specific recommendations made. I have provided a specific comment regarding the composition of the MHS Reengineering Coordination Team, clarifying the team's membership. Additionally, I have addressed AFMS concerns on some of the more global issues raised (see attachment).

AF specific comments on the IG recommendations are as follows:

Recommendation 1. "We recommend that the Under Secretary of Defense for Personnel and Readiness, in conjunction with the ASD(HA) determine the best Military Health System organization structure for implementing a Military Health System-wide personnel distribution process."

Response: Non-concur - The "best" MHS organizational structure has been looked at multiple times in the last few years, most recently by the Defense Medical Oversight Committee (now disbanded). There has been no answer which overwhelmingly improves the structure we presently have. The structure does not need to change. We do agree that a better distribution plan or process with improved interactions, collaboration and cooperation among the major players would facilitate better execution of the plan. This is addressed further in Recommendation 2.a.

Recommendation 2.a. "We recommend that the Under Secretary of Defense for Personnel and Readiness, in conjunction with the ASD(HA) revise the Military Health System Optimization Plan to: include a Military Health System (MHS)-wide methodology for allocating medical personnel during peacetime, regardless of Service affiliation, to achieve maximum efficiency and productivity."

Response: Non-concur - Allocation of medical personnel during peacetime is based on our Readiness Mission. First, each Service needs to define its overall Readiness mission. Each Service then needs to define the requirements needed to meet that mission. The structure of the MHS does not need to change to accomplish this. A Tri-Service Readiness group (probably line and medical stakeholders) chartered to look at the combined service requirements, would be a tool to evaluate the MHS for possible areas of unneeded redundancy or duplication (without adversely effecting doctrine or strategy). Some missions may purposely be

redundant (all services performing the same mission, i.e., some parts of the in-garrison Service specific support) but others may be joint in concept (one service taking care of other services medical need for specific scenarios, e.g., large long term field hospitals may best be handled by the Army). This would lead to efficiencies and best use of resources for the Services. It could also clarify the response for the CINC (Warfighters) as they work to resource medical support at various echelons of care. All these decisions would have to occur without degradation of Service specific readiness requirements. As these missions are being clearly defined, the Services (within another Chartered Workgroup) need to clearly define an MHS-wide strategy and methodology for allocating these readiness resources during peacetime. These methodologies will have to be based on objective readiness needs (as defined above), clinical currency (not putting physicians where there is not enough population to stay current for their readiness taskings) and business case analysis. The key outcome would be increasing efficiency while assuring clinical currency (see AF specific comments section of addendum).

Recommendation 2.b. "We recommend that the Under Secretary of Defense for Personnel and Readiness, in conjunction with the ASD(HA) revise the Military Health System Optimization Plan to: establish metrics, such as clinical specialty relative weighted product costs, for measuring the effectiveness and efficiency of Military Health System staffing and resources, and for measuring the success of the Optimization Plan."

Response: Concur - The AFMS uses this approach and has been operational for a year. We intend to evaluate the Clinical HEDIS metrics in the near future to further assess our progress. Preliminary results can be accessed using our public website <https://p2r2.usafsg.bolling.af.mil>.

We believe that total asset visibility is the only way to make progress. We do not necessarily punish for not meeting metrics, but instead are building the culture of measure, learn and improve. We want to see our MTFs on a positive vector for success. There are several Tri-service metric groups and these need to coalesce into one group to begin the process of getting to standard Tri-service metrics. This has been very difficult due to a new metrics or metric groups being established in a nearly ad hoc fashion. This only distracts from creating alignment within our healthcare system.

Thank you for providing me the opportunity to review and comment on the DoD IG draft report addressing the MHS Optimization Plan. With regards to the specific AFMS concerns, I would be pleased to discuss them in further detail at a convenient time. My point of contact is Col Sean Murphy at (202) 767-4269, DSN 297 or e-mail sean.murphy@usafsg.bolling.af.mil.



JAMES G. ROUDEBUSH  
Major General, USAF, MC, CFS  
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Attachment  
Air Force Comments

**Air Force Comments: Draft Report "Military Health System Optimization Plan"**

**Correction:** In the introduction of the Executive Summary it states "The team consisted of the Principal Deputy Assistant Secretary of Defense (Health Affairs), Director of TRICARE Management Activity, and the Deputy Surgeons General." This is inaccurate. It is more accurately stated in the report on page 1 under Optimization Plan, "The Principal Deputy ASD(HA) and the Director, TMA, in conjunction with the Deputy Surgeons General, created and staffed the Military Health System (MHS) Reengineering Coordination Team." This needs to be corrected in the Executive Summary.

**General Comments:**

The AF does not feel that the MHS Optimization Plan (MHSOP) is too focused at the MTF level. That may be how it is being implemented, but the plan is global. The AF believes in, continues to support and implement the plan as appropriate. This is a long term plan (5-10 years) and will not be implemented overnight. We have begun a process to be sure the intent of this plan is part of our future culture. Another disagreement we have is that the MHSOP is just for the realignment and distribution of peacetime healthcare assets (described in the executive summary). The basis of the plan is based on defining the readiness requirements. Readiness requirements drive the rest of the modeling and strategy. The IG review discusses this on page 3 under "Improving MHS Efficiency" but then seems to ignore it in the executive summary. In general, we agree with much of the report and would support more Tri-service emphasis on the MHSOP.

The AF strategy and process to get to this end state is described in the following paragraphs. It could be used as the basis for a Tri-service strategy but would need a lot of collaboration and open honest dialogue to work and would not happen overnight.

The AFMS continues to receive its readiness mission from the line leadership and build the readiness requirements based on that mission need. This mission continues to change due to the changing world we live in. The AFMS will have to be flexible and agile to meet this challenge. We call this global readiness mission our Readiness Case Analysis. To be sure we distribute these readiness requirements appropriately, we first consider the Currency Case Analysis, i.e. is there enough population or other need to support the readiness skill that the AF member needs to deploy? If not, we either will not send the member to that location in the future or we will build the education and training needed to be sure that the person keeps their readiness skills. The third and very important factor is the Business Case Analysis. Since our Currency Case Analysis for Clinicians is based on population, it is rare that there is a Currency Case for a provider to be at a location where it does not also meet the Business Case. The sites that this may not be true are remote CONUS locations and some OCONUS locations. This is the first year that we have attempted to resource in this manner. This resourcing (both the Currency and Business aspects) is built on civilian standards/benchmarks and each unit (provider and support staff) has specific targets of "relative value" productivity.

Population Health/Force Protection is in the center of our strategy and is also aligned with the MHSOP. We continue to support initiatives that build to this objective (Primary care Optimization and PCMBN are some examples). Also, we function by standardized metrics as much as possible. We have followed a plan for standardized business and clinical metrics and have moved to more advanced productivity metrics such as RVU's (as referenced in this IG report). We will also have public display of our HEDIS clinical metrics within a few months. We would happily share these ideas, tools, strategies and lessons learned with you or the other services and hope that our thoughts would be improved with input from our sister services (an initial meeting on this is already planned).

## **Audit Team Members**

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